

7/11/03

SEQUENCE LISTING

<110> Ashkenazi, Avi J.
Baker, Kevin
Gurney, Austin
Wood, William

<120> Apo-2DcR

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<141> 1997-06-18

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Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln Arg His Ser Phe
35 40 45
Lys Gly Glu Glu Cys Pro Ala Gly Ser His Arg Ser Glu His Thr Gly
50 55 60
Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn
65 70 75 80
Asn Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys Ser Asp Gln Lys
85 90 95
His Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys Gln Cys Lys
100 105 110
Glu Gly Thr Phe Arg Asn Glu Asn Ser Pro Glu Met Cys Arg Lys Cys
115 120 125
Ser Arg Cys Pro Ser Gly Glu Val Gln Val Ser Asn Cys Thr Ser Trp
130 135 140
Asp Asp Ile Gln Cys Val Glu Glu Phe Gly Ala Asn Ala Thr Val Glu
145 150 155 160
Thr Pro Ala Ala Glu Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala
165 170 175
Pro Ala Ala Glu Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro
180 185 190
Ala Ala Glu Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala
195 200 205
Ala Glu Glu Thr Met Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala

210	215	220	
Glu Glu Thr Met Thr Ser Pro Gly Thr Pro Ala Ser Ser His Tyr			
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Leu Ser Cys Thr Ile Val Gly Ile Ile Val Leu Ile Val Leu Ile			
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Val Phe Val			

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cgg cag gag gaa gtt ccc cag cag aca gtg gcc cca cag caa cag agg 327
 Arg Gln Glu Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln Arg
 30 35 40 45

cac agc ttc aag ggg gag gag tgt cca gca gga tct cat aga tca gaa 375
 His Ser Phe Lys Gly Glu Glu Cys Pro Ala Gly Ser His Arg Ser Glu
 50 55 60

cat act gga gcc tgt aac ccg tgc aca gag ggt gtg gat tac acc aac
 His Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn
 65 70 75

gct tcc aac aat gaa cct tct tgc ttc cca tgt aca gtt tgt aaa tca 471
 Ala Ser Asn Asn Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys Ser
 80 85 90

gat caa aaa cat aaa agt tcc tgc acc atg acc aga gac aca gtg tgt 519
 Asp Gln Lys His Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys
 95 100 105

cag tgt aaa gaa ggc acc ttc cg^g aat gaa aac tcc cca gag atg tgc
 Gln Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn Ser Pro Glu Met Cys
 110 115 120 125

cg ^g	aag	tgt	agc	agg	tgc	cct	agt	ggg	gaa	gtc	caa	gtc	agt	aat	tgt	615
Arg	Lys	Cys	Ser	Arg	Cys	Pro	Ser	Gly	Glu	Val	Gln	Val	Ser	Asn	Cys	
130								135						140		
ac ^g	tcc	tgg	gat	gat	atc	cag	tgt	gtt	gaa	gaa	ttt	ggt	gcc	aat	gcc	663
Thr	Ser	Trp	Asp	Asp	Ile	Gln	Cys	Val	Glu	Glu	Phe	Gly	Ala	Asn	Ala	
145								150						155		
ac ^t	gtg	gaa	acc	cca	gct	gct	gaa	gag	aca	atg	aac	acc	agc	ccg	ggg	711
Thr	Val	Glu	Thr	Pro	Ala	Ala	Glu	Glu	Thr	Met	Asn	Thr	Ser	Pro	Gly	
160							165					170				
ac ^t	cct	gcc	cca	gct	gct	gaa	gag	aca	atg	aac	acc	agc	cca	ggg	act	759
Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Asn	Thr	Ser	Pro	Gly	Thr	
175						180					185					
cc ^t	cc ^c	cc ^a	gct	gct	gaa	gag	aca	atg	acc	acc	agc	ccg	ggg	act	cct	807
Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	
190					195				200					205		
cc ^c	cc ^a	cc ^a	gct	gct	gaa	gag	aca	atg	acc	acc	agc	ccg	ggg	act	cct	855
Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	Ala	
210				215					220							
cc ^a	gct	gct	gaa	gag	aca	atg	acc	acc	agc	ccg	ggg	act	cct	gcc	tct	903
Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Ser	
225				230					235							
tct	cat	tac	ctc	tca	tgc	acc	atc	gta	ggg	atc	ata	gtt	cta	att	gtg	951
Ser	His	Tyr	Leu	Ser	Cys	Thr	Ile	Val	Gly	Ile	Ile	Val	Leu	Ile	Val	
240				245						250						
ct ^t	ct ^g	att	gt ^g	tt ^t	gt ^t	tgaaagactt	cactgtggaa	gaaattcctt								999
Leu	Leu	Ile	Val	Phe	Val											
255																
ccttacctga	aagg ^t tcagg	taggc ^g ctgg	ctgagg ^{gg} cg ^{gg}	ggggcg ^{ct} gg	acact ^{ct} ctg											1059
ccctgc ^c cc	ctctg ^c tgt ^g	ttcccacaga	cagaaaacg ^{cc}	tgccc ^{ct} tgcc	ccaaaaaaaaaaaa											1119
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				20				25						30		
Gln	Asp	Gly	Val	Gly	Asn	His	Thr	Met	Ala	Arg	Ile	Pro	Lys	Thr	Leu	
				35				40						45		

Lys	Phe	Val	Val	Val	Ile	Val	Ala	Val	Leu	Leu	Pro	Val	Leu	Ala	Tyr
50						55					60				
Ser	Ala	Thr	Thr	Ala	Arg	Gln	Glu	Glu	Val	Pro	Gln	Gln	Thr	Val	Ala
65						70				75					80
Pro	Gln	Gln	Gln	Arg	His	Ser	Phe	Lys	Gly	Glu	Glu	Cys	Pro	Ala	Gly
						85			90					95	
Ser	His	Arg	Ser	Glu	His	Thr	Gly	Ala	Cys	Asn	Pro	Cys	Thr	Glu	Gly
						100			105					110	
Val	Asp	Tyr	Thr	Asn	Ala	Ser	Asn	Asn	Glu	Pro	Ser	Cys	Phe	Pro	Cys
						115			120			125			
Thr	Val	Cys	Lys	Ser	Asp	Gln	Lys	His	Lys	Ser	Ser	Cys	Thr	Met	Thr
						130			135			140			
Arg	Asp	Thr	Val	Cys	Gln	Cys	Lys	Glu	Gly	Thr	Phe	Arg	Asn	Glu	Asn
145					150					155					160
Ser	Pro	Glu	Met	Cys	Arg	Lys	Cys	Ser	Arg	Cys	Pro	Ser	Gly	Glu	Val
					165				170					175	
Gln	Val	Ser	Asn	Cys	Thr	Ser	Trp	Asp	Asp	Ile	Gln	Cys	Val	Glu	Glu
					180				185					190	
Phe	Gly	Ala	Asn	Ala	Thr	Val	Glu	Thr	Pro	Ala	Ala	Glu	Glu	Thr	Met
					195			200				205			
Asn	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Asn
					210			215			220				
Thr	Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala	Glu	Glu	Thr	Met	Thr	Thr	
225					230				235					240	
Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser
					245				250					255	
Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro
					260				265			270			
Gly	Thr	Pro	Ala	Ser	Ser	His	Tyr	Leu	Ser	Cys	Thr	Ile	Val	Gly	Ile
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Ile	Val	Leu	Ile	Val	Leu	Leu	Ile	Val	Phe	Val					
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 Met Gln Gly Val Lys Glu Arg Phe Leu Pro Leu Gly Asn
 40 85 120

tct ggg gac aga gcg ccc cg^g cc^g cct gat gg^c cga gg^c agg gt^g cga 159
Ser Gly Asp Arg Ala Pro Arg Pro Pro Asp Gly Arg Gly Arg Val Arg

-25	-20	-15	
ccc	agg acc cag gac ggc gtc ggg aac cat acc atg gcc cg	ccg atc ccc	207
Pro	Arg Thr Gln Asp Gly Val Gly Asn His Thr Met Ala Arg Ile Pro		
-10	-5	1	5
aag acc cta aag ttc gtc gtc atc gtc gcg gtc ctg ctg cca gtc			255
Lys	Thr Leu Lys Phe Val Val Val Ile Val Ala Val Leu Leu Pro Val		
	10	15	20
cta gct tac tct gcc acc act gcc cg	cag gag gaa gtt ccc cag cag		303
Leu Ala Tyr Ser Ala Thr Ala Arg Gln Glu Glu Val Pro Gln Gln			
25	30	35	
aca gtg gcc cca cag caa cag agg cac agc ttc aag ggg gag gag tgt			351
Thr Val Ala Pro Gln Gln Arg His Ser Phe Lys Gly Glu Glu Cys			
40	45	50	
cca gca gga tct cat aga tca gaa cat act gga gcc tgt aac ccg tgc			399
Pro Ala Gly Ser His Arg Ser Glu His Thr Gly Ala Cys Asn Pro Cys			
55	60	65	
aca gag ggt gtg gat tac acc aac gct tcc aac aat gaa cct tct tgc			447
Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn Asn Glu Pro Ser Cys			
70	75	80	85
tcc cca tgt aca gtt tgt aaa tca gat caa aaa cat aaa agt tcc tgc			495
Phe Pro Cys Thr Val Cys Lys Ser Asp Gln Lys His Lys Ser Ser Cys			
90	95	100	
acc atg acc aga gac aca gtg tgt cag tgt aaa gaa ggc acc ttc cg			543
Thr Met Thr Arg Asp Thr Val Cys Gln Cys Lys Glu Gly Thr Phe Arg			
105	110	115	
aat gaa aac tcc cca gag atg tgc cg	aag tgt agc agg tgc cct agt		591
Asn Glu Asn Ser Pro Glu Met Cys Arg Lys Cys Ser Arg Cys Pro Ser			
120	125	130	
ggg gaa gtc caa gtc agt aat tgt acg tcc tgg gat gat atc cag tgt			639
Gly Glu Val Gln Val Ser Asn Cys Thr Ser Trp Asp Asp Ile Gln Cys			
135	140	145	
gtt gaa gaa ttt ggt gcc aat gcc act gtg gaa acc cca gct gct gaa			687
Val Glu Glu Phe Gly Ala Asn Ala Thr Val Glu Thr Pro Ala Ala Glu			
150	155	160	165
gag aca atg aac acc agc ccg ggg act cct gcc cca gct gct gaa gag			735
Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu			
170	175	180	
aca atg aac acc agc cca ggg act cct gcc cca gct gct gaa gag aca			783
Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr			
185	190	195	

atg acc acc agc ccg ggg act cct gcc cca gct gct gaa gag aca atg Met Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met 200 205 210	831
acc acc agc ccg ggg act cct gcc cca gct gct gaa gag aca atg acc Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Thr 215 220 225	879
acc agc ccg ggg act cct gcc tct tct cat tac ctc tca tgc acc atc Thr Ser Pro Gly Thr Pro Ala Ser Ser His Tyr Leu Ser Cys Thr Ile 230 235 240 245	927
gta ggg atc ata gtt cta att gtg ctt ctg att gtg ttt gtt Val Gly Ile Ile Val Leu Ile Val Leu Leu Ile Val Phe Val 250 255	969
tgaaaagactt cactgtggaa gaaattcctt ccttacctga aagggtcagg taggcgctgg ctgagggcgg gggcgctgg acactctctg ccctgcctcc ctctgctgtg ttcccacaga cagaaaacgcc tgccccctgcc caaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaaa aaaaaaaaaaaaa a	1029 1089 1149 1180
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Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn Asn
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Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys Ser Asp Gln Lys His
20 25 30
Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys Gln Cys Lys Glu
35 40 45

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aagagcggttc cttaccgcct atg gaa caa cgg gga cag aac gcc ccg gcc gct 172
Met Glu Gln Arg Gly Gln Asn Ala Pro Ala Ala
1 5 10

tcg ggg gcc cgg aaa agg cac ggc cca gga ccc agg gag gcg cgg gga 220
Ser Gly Ala Arg Lys Arg His Gly Pro Gly Pro Arg Glu Ala Arg Gly
15 20 25

gcc agg cct ggg ctc cgg gtc ccc aag acc ctt gtg ctc gtt gtc gcc 268
Ala Arg Pro Gly Leu Arg Val Pro Lys Thr Leu Val Leu Val Val Ala
30 35 40

gcg gtc ctg ctg ttg gtc tca gct gag tct gct ctg atc acc caa caa 316
Ala Val Leu Leu Val Ser Ala Glu Ser Ala Leu Ile Thr Gln Gln
45 50 55

gac cta gct ccc cag cag aga gcg gcc cca caa aag agg tcc agc 364
Asp Leu Ala Pro Gln Gln Arg Ala Ala Pro Gln Gln Lys Arg Ser Ser
60 65 70 75

ccc tca gag gga ttg tgt cca cct gga cac cat atc tca gaa gac ggt	412
Pro Ser Glu Gly Leu Cys Pro Pro Gly His His Ile Ser Glu Asp Gly	
80 85 90	
aga gat tgc atc tcc tgc aaa tat gga cag gac tat agc act cac tgg	460
Arg Asp Cys Ile Ser Cys Lys Tyr Gly Gln Asp Tyr Ser Thr His Trp	
95 100 105	
aat gac ctc ctt ttc tgc ttg cgc tgc acc agg tgt gat tca ggt gaa	508
Asn Asp Leu Leu Phe Cys Leu Arg Cys Thr Arg Cys Asp Ser Gly Glu	
110 115 120	
gtg gag cta agt ccc tgc acc acg acc aga aac aca gtg tgt cag tgc	556
Val Glu Leu Ser Pro Cys Thr Thr Arg Asn Thr Val Cys Gln Cys	
125 130 135	
gaa gaa ggc acc ttc cg ^g gaa gaa gat tct cct gag atg tgc cg ^g aag	604
Glu Glu Gly Thr Phe Arg Glu Asp Ser Pro Glu Met Cys Arg Lys	
140 145 150 155	
tgc cgc aca ggg tgt ccc aga ggg atg gtc aag gtc ggt gat tgt aca	652
Cys Arg Thr Gly Cys Pro Arg Gly Met Val Lys Val Gly Asp Cys Thr	
160 165 170	
ccc tgg agt gac atc gaa tgt gtc cac aaa gaa tca ggc atc atc ata	700
Pro Trp Ser Asp Ile Glu Cys Val His Lys Glu Ser Gly Ile Ile Ile	
175 180 185	
gga gtc aca gtt gca gcc gta gtc ttg att gtg gct gtg ttt gtt tgc	748
Gly Val Thr Val Ala Ala Val Val Leu Ile Val Ala Val Phe Val Cys	
190 195 200	
aag tct tta ctg tgg aag aaa gtc ctt cct tac ctg aaa ggc atc tgc	796
Lys Ser Leu Leu Trp Lys Lys Val Leu Pro Tyr Leu Lys Gly Ile Cys	
205 210 215	
tca ggt ggt ggt ggg gac cct gag cgt gtg gac aga agc tca caa cga	844
Ser Gly Gly Gly Asp Pro Glu Arg Val Asp Arg Ser Ser Gln Arg	
220 225 230 235	
cct ggg gct gag gac aat gtc ctc aat gag atc gtg agt atc ttg cag	892
Pro Gly Ala Glu Asp Asn Val Leu Asn Glu Ile Val Ser Ile Leu Gln	
240 245 250	
ccc acc cag gtc cct gag cag gaa atg gaa gtc cag gag cca gca gag	940
Pro Thr Gln Val Pro Glu Gln Glu Met Glu Val Gln Glu Pro Ala Glu	
255 260 265	
cca aca ggt gtc aac atg ttg tcc ccc ggg gag tca gag cat ctg ctg	988
Pro Thr Gly Val Asn Met Leu Ser Pro Gly Glu Ser Glu His Leu Leu	
270 275 280	

gaa ccg gca gaa gct gaa agg tct cag agg agg ctg ctg gtt cca Glu Pro Ala Glu Ala Glu Arg Ser Gln Arg Arg Arg Leu Leu Val Pro 285 290 295	1036
gca aat gaa ggt gat ccc act gag act ctg aga cag tgc ttc gat gac Ala Asn Glu Gly Asp Pro Thr Glu Thr Leu Arg Gln Cys Phe Asp Asp 300 305 310 315	1084
ttt gca gac ttg gtg ccc ttt gac tcc tgg gag ccg ctc atg agg aag Phe Ala Asp Leu Val Pro Phe Asp Ser Trp Glu Pro Leu Met Arg Lys 320 325 330	1132
ttg ggc ctc atg gac aat gag ata aag gtg gct aaa gct gag gca gcg Leu Gly Leu Met Asp Asn Glu Ile Lys Val Ala Lys Ala Glu Ala Ala 335 340 345	1180
ggc cac agg gac acc ttg tac acg atg ctg ata aag tgg gtc aac aaa Gly His Arg Asp Thr Leu Tyr Thr Met Leu Ile Lys Trp Val Asn Lys 350 355 360	1228
acc ggg cga gat gcc tct gtc cac acc ctg ctg gat gcc ttg gag acg Thr Gly Arg Asp Ala Ser Val His Thr Leu Leu Asp Ala Leu Glu Thr 365 370 375	1276
ctg gga gag aga ctt gcc aag cag aag att gag gac cac ttg ttg agc Leu Gly Glu Arg Leu Ala Lys Gln Lys Ile Glu Asp His Leu Leu Ser 380 385 390 395	1324
tct gga aag ttc atg tat cta gaa ggt aat gca gac tct gcc wtg tcc Ser Gly Lys Phe Met Tyr Leu Glu Gly Asn Ala Asp Ser Ala Xaa Ser 400 405 410	1372
taagtgtat tctttcagg aagttagacc ttccctgggtt tacaaaaaaa cccaactgga ctccagtca taggaaagtgc cacaattgt cacatgaccg gtactggaaag aaactctccc atccaacatc acccagtggta tgAACATCC tgtaactttt cactgcactt ggcattattt ttataagctg aatgtgataa taaggacact atggaaatgt ctggatcatt ccgttgtgc gtactttgag atttggtttt ggatgtcatt gtttcacag cactttta tcctaattgt aatgttttat ttatttattt gggcacatt gtaagatcca tctacaaaaaa aaaaaaaaaaa aaaaaaaaggc cgcccgac tctagagtgc acctgcagaa gcttggccgc catggcc	1432 1492 1552 1612 1672 1732 1792 1799
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Val Ser Ala Glu Ser Ala Leu Ile Thr Gln Gln Asp Leu Ala Pro Gln
 50 55 60
 Gln Arg Ala Ala Pro Gln Gln Lys Arg Ser Ser Pro Ser Glu Gly Leu
 65 70 75 80
 Cys Pro Pro Gly His His Ile Ser Glu Asp Gly Arg Asp Cys Ile Ser
 85 90 95
 Cys Lys Tyr Gly Gln Asp Tyr Ser Thr His Trp Asn Asp Leu Leu Phe
 100 105 110
 Cys Leu Arg Cys Thr Arg Cys Asp Ser Gly Glu Val Glu Leu Ser Pro
 115 120 125
 Cys Thr Thr Thr Arg Asn Thr Val Cys Gln Cys Glu Glu Gly Thr Phe
 130 135 140
 Arg Glu Glu Asp Ser Pro Glu Met Cys Arg Lys Cys Arg Thr Gly Cys
 145 150 155 160
 Pro Arg Gly Met Val Lys Val Gly Asp Cys Thr Pro Trp Ser Asp Ile
 165 170 175
 Glu Cys Val His Lys Glu Ser Gly Ile Ile Ile Gly Val Thr Val Ala
 180 185 190
 Ala Val Val Leu Ile Val Ala Val Phe Val Cys Lys Ser Leu Leu Trp
 195 200 205
 Lys Lys Val Leu Pro Tyr Leu Lys Gly Ile Cys Ser Gly Gly Gly
 210 215 220
 Asp Pro Glu Arg Val Asp Arg Ser Ser Gln Arg Pro Gly Ala Glu Asp
 225 230 235 240
 Asn Val Leu Asn Glu Ile Val Ser Ile Leu Gln Pro Thr Gln Val Pro
 245 250 255
 Glu Gln Glu Met Glu Val Gln Glu Pro Ala Glu Pro Thr Gly Val Asn
 260 265 270
 Met Leu Ser Pro Gly Glu Ser Glu His Leu Leu Glu Pro Ala Glu Ala
 275 280 285
 Glu Arg Ser Gln Arg Arg Arg Leu Leu Val Pro Ala Asn Glu Gly Asp
 290 295 300
 Pro Thr Glu Thr Leu Arg Gln Cys Phe Asp Asp Phe Ala Asp Leu Val
 305 310 315 320
 Pro Phe Asp Ser Trp Glu Pro Leu Met Arg Lys Leu Gly Leu Met Asp
 325 330 335
 Asn Glu Ile Lys Val Ala Lys Ala Glu Ala Ala Gly His Arg Asp Thr
 340 345 350
 Leu Tyr Thr Met Leu Ile Lys Trp Val Asn Lys Thr Gly Arg Asp Ala
 355 360 365
 Ser Val His Thr Leu Leu Asp Ala Leu Glu Thr Leu Gly Glu Arg Leu
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 Ala Lys Gln Lys Ile Glu Asp His Leu Leu Ser Ser Gly Lys Phe Met
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29

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Ser Pro Arg Leu Arg Val His Lys Thr Phe Lys Phe Val Val Val Gly
35 40 45
Val Leu Leu Gln Val Val Pro Ser Ser Ala Ala Thr Ile Lys Leu His
50 55 60
Asp Gln Ser Ile Gly Thr Gln Gln Trp Glu His Ser Pro Leu Gly Glu
65 70 75 80
Leu Cys Pro Pro Gly Ser His Arg Ser Glu Arg Pro Gly Ala Cys Asn
85 90 95
Arg Cys Thr Glu Gly Val Gly Tyr Thr Asn Ala Ser Asn Asn Leu Phe
100 105 110
Ala Cys Leu Pro Cys Thr Ala Cys Lys Ser Asp Glu Glu Glu Arg Ser
115 120 125
Pro Cys Thr Thr Thr Arg Asn Thr Ala Cys Gln Cys Lys Pro Gly Thr
130 135 140
Phe Arg Asn Asp Asn Ser Ala Glu Met Cys Arg Lys Cys Ser Thr Gly
145 150 155 160
Cys Pro Arg Gly Met Val Lys Val Lys Asp Cys Thr Pro Trp Ser Asp
165 170 175
Ile Glu Cys Val His Lys Glu Ser Gly Asn Gly His Asn Ile Trp Val
180 185 190
Ile Leu Val Val Thr Leu Val Val Pro Leu Leu Leu Val Ala Val Leu
195 200 205
Ile Val Cys Cys Cys Ile Gly Ser Gly Cys Gly Gly Asp Pro Lys Cys
210 215 220
Met Asp Arg Val Cys Phe Trp Arg Leu Gly Leu Leu Arg Gly Pro Gly
225 230 235 240
Ala Glu Asp Asn Ala His Asn Glu Ile Leu Ser Asn Ala Asp Ser Leu
245 250 255
Ser Thr Phe Val Ser Glu Gln Gln Met Glu Ser Gln Glu Pro Ala Asp
260 265 270
Leu Thr Gly Val Thr Val Gln Ser Pro Gly Glu Ala Gln Cys Leu Leu
275 280 285
Gly Pro Ala Glu Ala Glu Gly Ser Gln Arg Arg Arg Leu Leu Val Pro

290	295	300
Ala Asn Gly Ala Asp Pro Thr Glu Thr Leu Met	Leu Phe Phe Asp Lys	
305	310	315 320
Phe Ala Asn Ile Val Pro Phe Asp Ser Trp Asp Gln	Leu Met Arg Gln	
325	330	335
Leu Asp Leu Thr Lys Asn Glu Ile Asp Val Val Arg	Ala Gly Thr Ala	
340	345	350
Gly Pro Gly Asp Ala Leu Tyr Ala Met Leu Met Lys	Trp Val Asn Lys	
355	360	365
Thr Gly Arg Asn Ala Ser Ile His Thr Leu Leu Asp	Ala Leu Glu Arg	
370	375	380
Met Glu Glu Arg His Ala Lys Glu Lys Ile Gln Asp	Leu Leu Val Asp	
385	390	395 400
Ser Gly Lys Phe Ile Tyr Leu Glu Asp Gly Thr Gly	Ser Ala Val Ser	
405	410	415
Leu Glu		

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 <211> 74
 <212> PRT
 <213> HUMAN

<400> 15			
Val Met Asp Ala Val Pro Ala Arg Arg	Trp Lys Glu Phe Val Arg Thr		
1	5	10	15
Leu Gly Leu Arg Glu Ala Glu Ile Glu Ala Val Glu Val Glu Ile Gly			
20	25	30	
Arg Phe Arg Asp Gln Gln Tyr Glu Met Leu Lys Arg	Trp Arg Gln Gln		
35	40	45	
Gln Pro Ala Gly Leu Gly Ala Val Tyr Ala Ala Leu Glu Arg Met Gly			
50	55	60	
Leu Asp Gly Cys Val Glu Asp Leu Arg Ser			
65	70		

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<400> 16			
Val Val Glu Asn Val Pro Pro Leu Arg	Trp Lys Glu Phe Val Arg Arg		
1	5	10	15
Leu Gly Leu Ser Asp His Glu Ile Asp Arg Leu Glu Leu Gln Asn Gly			
20	25	30	
Arg Cys Leu Arg Glu Ala Gln Tyr Ser Met Leu Ala Thr Trp Arg Arg			
35	40	45	
Arg Thr Pro Arg Arg Glu Ala Thr Leu Glu Leu Leu Gly Arg Val Leu			
50	55	60	
Arg Asp Met Asp Leu Leu Gly Cys Leu Glu Asp Ile Glu Glu			
65	70	75	

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<211> 77
<212> PRT
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<400> 17

Ile Ala Gly Val His Thr Leu Ser Gln Val Lys Gly Phe Val Arg Lys
1 5 10 15
Asn Gly Val Asn Glu Ala Lys Ile Asp Glu Ile Lys Asn Asp Asn Val
20 25 30
Gln Asp Thr Ala Glu Gln Lys Val Gln Leu Leu Arg Asn Trp His Gln
35 40 45
Leu His Gly Lys Lys Glu Ala Tyr Asp Thr Leu Ile Lys Asp Leu Lys
50 55 60
Lys Ala Asn Leu Cys Thr Leu Ala Glu Lys Ile Gln Thr
65 70 75